

Importance of Promoting Seat Belt Use Among Teens

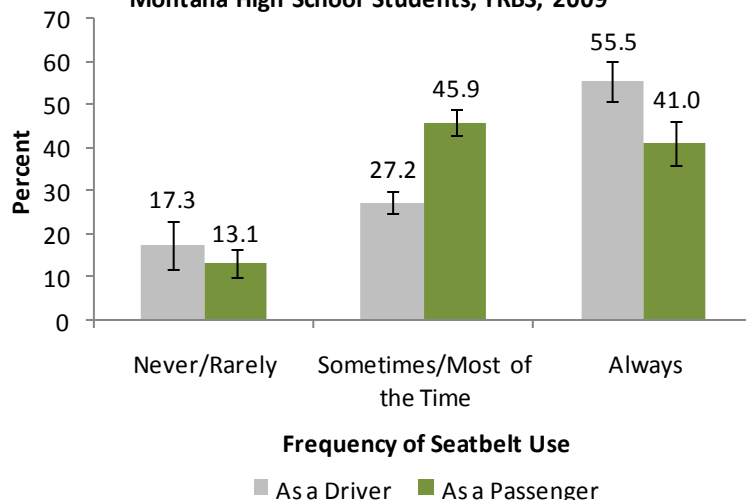
March 2010

Why use a seat belt?

Motor vehicle crashes (MVC) are the leading cause of death among adolescents in Montana and the United States. The rate of fatal crashes among teenage drivers is higher than any other age group per 100,000 licensed drivers.¹ Teenagers lack significant driving experience placing themselves and their passengers at risk. Use of a seat belt is the single most effective means of reducing fatal and nonfatal injuries in MVC.² However, previous reports have documented lower seatbelt use among teenagers.^{3,4}

This report summarizes data from the 2009 Montana Youth Behavior Risk Survey⁵ on high school student use of a seat belt while driving and as a passenger and also presents Montana trauma registry data on severe injuries (fatal and nonfatal) among 14-18 year olds.

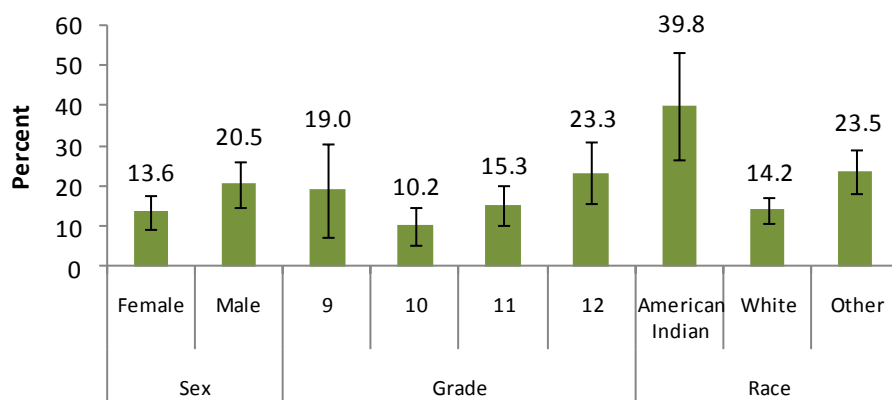
Figure 1. Self-Reported Seat Belt Use Among Montana High School Students, YRBS, 2009



Who is not wearing a seat belt?

- Only 55.5% of Montana high school students reported always using a seatbelt while driving a vehicle (Figure 1). Nationally, 59% of students report always wearing a seat belt.³ Only 41% of Montana high school students reported always using a seat belt as a passenger in a vehicle.
- High school students are less likely than adults to always wear a seat belt while driving. In Montana, 71% of adults report that they always wear a seatbelt while driving or riding in a vehicle (BRFSS, 2008, data not shown).
- Males more frequently reported rarely or never using a seatbelt while driving than females. However, the difference is not statistically significant (Figure 2).
- Students in 12th grade more frequently drove without their seatbelt as compared to 9th, 10th and 11th graders. Nearly 1 in 5 ninth graders report rarely or never using their seatbelt (Figure 2).
- A significantly higher proportion of American Indian students than White students reported rarely or never using a seat belt while driving (Figure 2).

Figure 2. Percent of High School Students Who Never or Rarely Wear a Seat Belt While Driving by Sex, Grade, and Race, YRBS, 2009, Montana



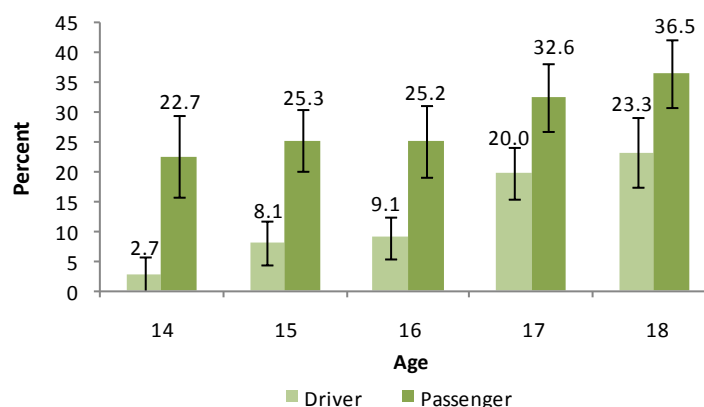
Prevalence of never wearing seat belts is **twice** as high in states with only secondary seat belt laws.⁶

I -95% confidence intervals

Impaired Driving Among 14-18 Year Olds

At all levels of blood alcohol concentration, the risk of being involved in a fatal crash is greater for young people than for older people.⁷ Alcohol use while driving a vehicle or riding with someone who has been consuming alcohol increases with age among Montanan high school students (Figure 3). While younger students are not drinking and driving at high frequencies, nearly 1/4 report riding in a vehicle with someone who is under the influence of alcohol (Figure 3). Of the high school students who reported not always wearing a seatbelt, 25.3% also reported driving after drinking alcohol and 43.3% reported riding in the last 30 days with someone who had been drinking alcohol (data not shown).

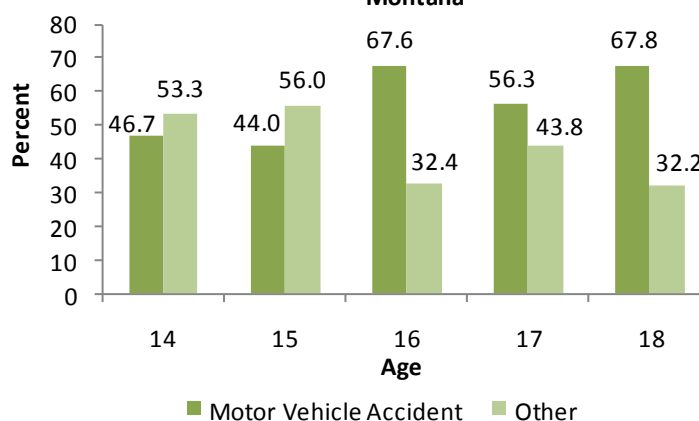
Figure 3. Frequency of Driving After Consuming Alcohol and Riding with a Driver Who Has Been Consuming Alcohol Among 14-18 Year Olds, YRBS, 2009, Montana



Severe Injuries from MVC Among 14-18 Year Olds

Among Montanan 14-18 year olds, the most common cause of mortality is a MVC. In 2006 the crude mortality rate for MVC among 14-18 year olds was higher in Montana, 26.5 deaths/100,000 population than in the US, 17.5 deaths/100,000 population. Figure 4 shows the percent of reported severe injuries (fatal and nonfatal) for teens ages 14-18.⁸ For students 16-18 years old, the majority of reported severe injuries were caused by a motor vehicle crash (Figure 4). Of teens aged 14-18 who were involved in a MVC and sustained severe injuries, 71% were not wearing a seatbelt (data not shown).

Figure 4. Reported Fatal and Nonfatal Injuries with a Blunt Cause Among 14-18 Year Olds, 2008, Montana



Conclusion and Recommendations

Montana high school students report always using a seatbelt about half of the time while driving a vehicle and less than half of the time while riding as a passenger in a vehicle. American Indians and students in 9th and 12th grades are more likely to report never or rarely using a seatbelt. Furthermore, students not always wearing a seatbelt often drive after drinking alcohol or ride with a driver who has been drinking alcohol. Finally, the mortality rate from MVC in Montana is 50% higher than the national rate for teens aged 14-18 leading to hundreds of years of life lost and significant long term adverse health effects.

Seat belt use is the single most effective means of reducing fatal and nonfatal injuries in a motor vehicle crash.

Seatbelt use is essential for protecting drivers and passengers in a motor vehicle crash. Additional efforts should be made to increase seatbelt use overall among Montana high school students, especially in the American Indian populations. Primary seat belt laws have been shown to be an effective way to increase seat belt use by vehicle occupants. Enacting and enforcing a primary seat belt law would decrease deaths and hospitalizations in Montana. Primary seat belt laws have also been shown to decrease disparities in belt use.⁶

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References:

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